REMARKS

Claims 1-12 were previously withdrawn. No claims are amended. Reconsideration and allowance of remaining claims 13 and 14 is respectfully requested in light of the following remarks.

Allowable Subject Matter

Claim 14 is objected to as being dependent upon a rejected base claim, but is indicated as being allowable if rewritten in independent form.

The applicants appreciate this indication of allowable subject matter, but at the present time wish to retain claim 14 in its present form so that the arguments advanced with regard to claim 13 may be fully considered.

Claim Rejections – 35 USC § 102

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 3,581,212 to McMurray ("McMurray"). The applicants disagree.

Claim 13 recites transforming the DC voltage or regulated AC input voltage input into a plurality of steps of the step-wave AC waveform. It is alleged that McMurray (FIGs. 5-7) teach this feature.

Claim 13 also recites pulse-width modulating the DC voltage or regulated AC voltage input while the input voltage is being transformed into a step of the output AC waveform. It is alleged that this feature is "inherent in voltage regulator 38" of McMurray FIG. 8. The applicants disagree that pulse-width modulation, or PWM, is inherent to McMurray's voltage regulator 38.

The term "pulse-width modulating" is explicitly recited in claim 13. The specification (at page 19, lines 22-23) explicitly states that "PWM refers to the change of the on and off times (duty cycle) of pulses, such that the average voltage is the peak voltage times the duty factor." Because the specification provides a definition for the term "pulse-width modulating," the provided definition can and should be used in interpreting the claim language. MPEP 2111.01, *citing* In re Vogel, 422 F.2d 438, 441 (CCPA 1970).

Contrary to the above definition for "pulse-width modulating," nowhere does McMurray describe changing the on and off times (duty cycle) of pulses, such that the average voltage is the peak voltage times the duty factor. Rather, McMurray describes the stepped wave operation of a typical stepped wave power converter (column 3, lines 30-60).

The applicants have stated that the use of conventional step wave switching algorithms to produce a simulated AC output is well-known (page 19, lines 19-20). The applicants have also stated that it is also quite common for conventional inverters to utilize a pulse width modulation (PWM) switching algorithm to approximate a sine wave (page 19, lines 20-22).

However, the applicants teach that none of the prior art power converters have combined a step wave output with PWM, and that a significant improvement in the art is provided by embodiments of the invention through a novel combination of step wave power conversion and PWM (page 19, lines 24-27).

Thus, while McMurray certainly does teach a conventional step-wave switching algorithm, it fails to combine that teaching with a conventional PWM switching algorithm. This combination of conventional features is required by claim 13. Consequently, McMurray fails to anticipate claim 13 because it fails to teach the identical invention in as complete detail as contained in the claim. MPEP 2131, *citing* Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236 (Fed. Cir. 1989).

Furthermore, since claim 14 depends from claim 13 the applicants submit that claim 14 is allowable in its present form.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 13-14 is requested. Please telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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